



# Testing Department Abstract Report

## Carbothane 134 HG

### PHYSICAL CHARACTERISTICS

|                       |  |
|-----------------------|--|
| Generic Type:         | Aliphatic Acrylic Polyurethane   |
| Description:          | Thin film, high gloss finish with exceptional weathering performance characteristics. Used extensively in virtually all industrial or architectural markets, 134 HG provides a smooth, durable finish that has superior resistance to corrosion, abrasion and chemical exposure. |
| Solids By Volume :    | 70%  |
| VOC's (as supplied):  | 2.2 lbs./gal.  |
| DFT Range (per coat): | 2.0-2.5 mils   |
| Colors:               | Available in Rapid Tint Service  |
| Finish:               | Gloss  |

### FEATURE / BENEFIT CHARACTERISTICS

- Excellent weatherability
- Exceeds SSPC Paint 36 specification for a Level 3 urethane
- High solids, low VOC content
- Excellent flow characteristics allow for application by spray or roller
- Superior impact and abrasion resistance
- Available in all Carboline colors including metallic-pigmented colors
- Indefinite recoatability
- VOC compliant to current AIM regulations

### APPLICATION CHARACTERISTICS

Minimum Ambient Temp: 35F  
Pot Life: 4 Hours @ 75F  
Mix Ratio: 4:1 (A toB)

#### Curing Schedule

Dry to Handle (Minimum)  
75F: 8 hours

Dry to Recoat  
75F: 8 hours

***From the Carboline Testing Center***

The technical data furnished are true and accurate to the best of our knowledge. However, no guarantee of accuracy is given or implied.



PERFORMANCE DATA

| TEST/METHOD                         | CONDITIONS   | SYSTEM   | RESULTS   | REPT. REF. |
|-------------------------------------|--|--|---|------------|
| Adhesion<br>ASTM D4060              | CS-17 Wheel, 1,000g load, 1,000 cycles   | Carbothane 134 HG  | 70 mg.  | 09360      |
| ASTM D4541                          | Pneumatic Tester, psi  | Epoxy Primer /<br>Carbothane 134 HG  | 2,562   | 09360      |
| ASTM D3359                          | X-cut Knife Test   | Epoxy Primer /<br>Carbothane 134 HG  | 5A  | 09360      |
| Flexibility<br>ASTM D522            | Cylindrical Mandrel  | Carbothane 134 HG  | Pass 1/8 ; greater than 32% elongation  | 09360      |
| Pencil Hardness<br>ASTM D3363       | Pencil Test  | Epoxy Primer /<br>Carbothane 134 HG  | H   | 09360      |
| Impact<br>ASTM D2794                | Gardner Impact Tester, Direct (intrusion), 1/8 steel substrate, inch-pounds              | Carbothane 134 HG  | 155; no visible cracking  | 03259      |
| Weatherometer<br>ASTM G26           | Xenon Arc light, Type EH; 2,000 hrs  | Epoxy Primer /<br>Carbothane 134 HG  | No blistering, rusting or cracking; gloss retention greater than 85%; color change less than 1 McAdam unit.   | 09360      |
| Weathering Resistance<br>ASTM D4587 | Method D, UV A-340 Bulbs 8 hrs UV/60C followed by 4 hrs @ 45C condensation; 3,000hrs     | Organic Zinc Primer /<br>Epoxy / Carbothane 134 HG   | No rusting, blistering or loss of adhesion; less than 5% gloss loss.  | 03390*     |
| Immersion Resistance                | Fresh water @ 75F, 30 days<br><br>Salt water (5% aqueous sodium chloride) @ 75F, 30 days | Organic Zinc Primer /<br>Epoxy / Carbothane 134 HG<br><br>Organic Zinc Primer /<br>Epoxy / Carbothane 134 HG | No rusting in the scribe, no blistering, softening or discoloration of the coating.<br><br>No rusting in the scribe; no blistering, softening or discoloration of the coating | 03390*     |
| Salt Fog<br>ASTM B117               | 3,000 hrs  | Organic Zinc Primer /<br>Epoxy / Carbothane 134 HG   | No rusting, blistering, loss of bond or any measurable creepage from the scribe mark  | 03390*     |

Coatings were tested at the recommended thickness, applied over steel, abrasive blasted in accordance with SSPC-SP10, unless otherwise noted.

\*Report by a qualified, independent test agency is available.

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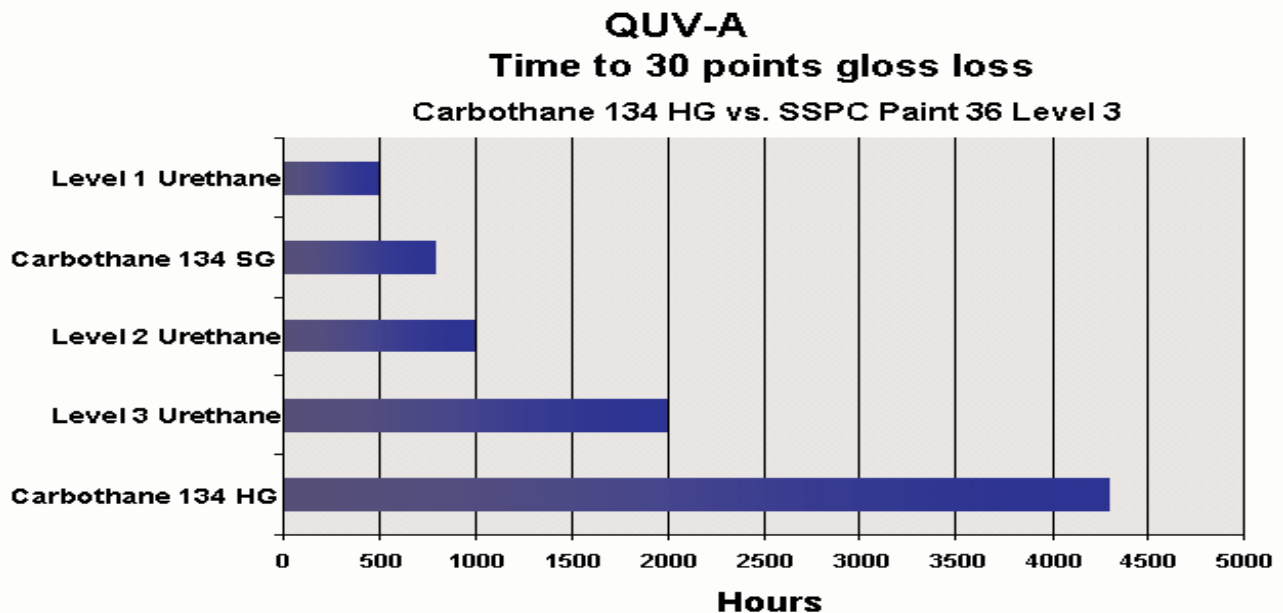


Carbothane 134 HG far exceeds the SSPC Paint 36 Level 3 requirement for gloss retention and color shift. SSPC SSPC-Paint 36 defines three separate performance levels for two-component, weatherable, aliphatic, polyurethane coatings, as outlined below.

| Level | South Florida Exposure | QUV-A Exposure |
|-------|------------------------|----------------|
| 1     | 12 months*             | 500 hours*     |
| 2     | 24 months*             | 1000 hours*    |
| 3     | 48 months*             | 2000 hours*    |

\*Time to noticeable change. Noticeable change is defined as a gloss loss of no than 30 units or more than 2ΔE color units.

Carbothane 134 HG surpasses the Level 3 QUV-A exposure requirement by more than 2-fold. Furthermore it maintains its initial gloss of 90-80% beyond the Level 2 exposure requirement.



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